

Title (en)

METHOD FOR DETECTING AND LOCATING A LEAK IN A DRINKING WATER SUPPLY NETWORK

Title (de)

VERFAHREN ZUR ERKENNUNG UND ORTUNG EINES LECKS IN EINEM TRINKWASSERVERSORGUNGSNETZ

Title (fr)

PROCÉDÉ DE DÉTECTION ET DE LOCALISATION D'UNE FUITE DANS UN RÉSEAU DE DISTRIBUTION D'EAU POTABLE

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Application

EP 11735812 A 20110614

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Abstract (en)

[origin: WO2011157685A1] The invention relates to a method for locating a leak in a drinking water supply network by carrying out an amplitude and frequency analysis of leak noise spectra (10, 17) which are recorded at several points in the network, the existence of a leak (11) being derived from the presence of typical leak noises and the position of the leak being derived from the intensity and frequency data of the leak noise data. A sum level signal is determined on the individual measuring points which contain information about the noise level present at the measuring point; the sum level signal being subjected to the frequency analysis and the signal component determines the maximum frequency (FM) contained in the sum signal and is significantly above the noise level; for the respective measuring point, an index variable $LI = SP \cdot F$ is formed, said index variable being a value for the product from the sum signal level (SP) and the maximum frequency (MF) of the noise spectrum provided on the measuring point, and the position of the leak is deduced from the spatial distribution of identical values of the index variable, corresponding to the same distances of the measuring point from the measuring point to the leak which is being looked for.

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